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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,369	08/31/2001	Soemin Tjong	MS1-921US	2116
22801	7590	07/24/2006	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			JOO, JOSHUA	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/945,369	TJONG ET AL.	
	Examiner	Art Unit	
	Joshua Joo	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 May 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 and 32-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 and 32-44 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/26/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

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Detailed Action

1. Claims 1-14, 32-44 are presented for examination.
2. In view of the Appeal Brief filed on 5/01/2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted 6/26/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4, 9-14, 32, 33, 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, US Patent #6,138,178 (Watanabe hereinafter), in view of Narisi et al, US Patent #6,233,619 (Narisi hereinafter).

6. As per claim 1, Watanabe teaches substantially the invention as claimed including a data communication system configured to communicatively link a host device and a remote client device with a point-to-point data communication link, the host device and the remote client device each configured for multipoint data communication over a distributed network, Watanabe's teachings comprising:

a remote data communication interface driver of the host device implemented in the remote client device (Col 7, lines 15-25. Driver of device 20 stored in controller.), the remote data communication interface driver configured to communicatively link with a data communication interface of the host device via the point-to-point data communication link (Col 1, lines 45-49; Col 2, lines 48-57. Controller communicates with controlled device.).

7. Watanabe does not teach:

a virtual driver component configured to communicate with the remote data communication interface driver and the remote client device; and

a virtual network configured to communicatively link the remote data communication interface driver and the virtual driver component in the remote client device.

8. Narisi teaches of a transport layer interface for high-speed communication between two computer systems where an NT server comprises of a virtual LAN miniport driver used to provide communications between the NT server and a second server (Col 16, lines 29-35). The virtual LAN driver appears as a "Virtual Lan" to provide a link between NDIS interface and

the NT server (Fig 8; Col 16, lines 29-36; 43-60). The NT server communicates messages from a client to the second server (Col 14, lines 22-25).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe and Narisi because the teachings of Narisi of Paragraph 8 would improve the system of Watanabe by providing a high speed communication interface, and the use of a virtual LAN would allow for two devices to use their native mechanism to communicate with each other.

10. As per claim 32, Watanabe teaches substantially the invention as claimed including a method for implementing a point-to-point data communication link between computing devices, Watanabe's teachings comprising:

implementing a remote network communication component of a host computing device in a remote client computing device, the remote network communication component designed for data communication over a distributed network (Col 1, lines 45-49; Col 2, lines 48-57. Controller communicates with controlled device. Col 7, lines 15-25. Driver of device 20 stored in controller.).

11. Watanabe does not teach:

implementing a connection interface to couple the remote network communication component with the host computing device; and

implementing a virtual network to communicatively link the remote network communication component and a virtual driver component of the remote client computing device.

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12. Narisi teaches of a transport layer interface for high-speed communication between two computer systems where an NT server comprises of a virtual LAN miniport driver used to provide communications between the NT server and a second server (Col 16, lines 29-35). The virtual LAN driver appears as a “Virtual Lan” to provide a link between NDIS interface and the NT server (Fig 8; Col 16, lines 29-36; 43-60). The NT server communicates messages from a client to the second server (Col 14, lines 22-25).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe and Narisi because the teachings of Narisi of Paragraph 12 would improve the system of Watanabe by providing a high speed communication interface, and the use of a virtual LAN would allow for two devices to use their native mechanism to communicate with each other.

14. As per claims 4 and 42, Watanabe does not teach of the data communication system, wherein the virtual network is a local area network.

15. Narisi teaches of a virtual transport layer interface, where the virtual network is a LAN (Col 16, lines 29-36).

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe and Narisi because the teachings of Narisi's to use a virtual LAN would improve the system of Watanabe and Narisi by allowing two devices to use their native mechanism to communicate with each other.

17. As per claims 9 and 36, Watanabe teaches the data communication system, further comprising a connection interface configured to couple the point-to-point data communication link with the client device (Col 1, lines 45-49; Col 5, lines 45-48. Point to point communication.).
18. As per claims 10 and 37, Watanabe teaches the data communication system, further comprising a Universal Serial Bus data communication interface configured to couple the point-to-point data communication link with the client device (Col 1, lines 45-49. USB.).
19. As per claims 11 and 38, Watanabe teaches the data communication system, further comprising a 1394 bus data communication interface configured to couple the point-to-point data communication link with the client device (Col 5, lines 45-49. Connected by cable in accordance with IEEE 1394.).
20. As per claims 12-14, 39-41, Watanabe teaches of teaches of communicating via USB and IEEE 394 (Col 1, lines 45-49; Col 5, lines 45-49). Watanabe does not teach of a wireless data communication interface, a Bluetooth data communication interface, and an infrared data communication interface configured to couple the point-to-point data communication link with the remote client device.
21. However, a wireless communication interface, a Bluetooth data communication interface, and an infrared data communication interface for point-to-point communication are well known and accepted in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a wireless, Bluetooth, and infrared data communication interface because doing so would improve the system of Watanabe and Narisi

by supporting a plurality of different communication interfaces, which would increase the number of devices that may communicate with other devices.

22. As per claim 33, Watanabe teaches the method as recited in claim 32, wherein implementing the remote network communication component includes implementing a data communication interface driver to communicatively link with a data communication interface of the host computing device via the point-to-point data communication link (Col 1, lines 44-48; Col 7, lines 15-25. Driver of device 20 stored in controller for communication with device 20.).

23. Claims 2-3, 5-8, 34-35, 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe and Narisi, in view of Applicant's Admitted Prior Art (AAPA)

24. As per claims 2, 3, 34, and 35, Watanabe does not teach the data communication system, wherein the remote data communication interface driver is a Remote Network Driver Interface Specification (NDIS) driver and the data communication interface is a Remote NDIS component configured to communicate Remote NDIS messages with the Remote NDIS driver via the point-to-point data communication link.

25. AAPA discloses of an computing device comprising a Remote NDIS miniport driver, which communicates with a remote device, wherein the computing device and the remote device communicate using remote NDIS message and, and via a USB connection (Page 1, lines 8-10; Page 7, lines 12-15; Page 8, lines 1-2).

26. AAPA does not teach explicitly teach that the data communication interface is a Remote NDIS component. However, the remote device is capable of receiving and transmitting NDIS messages. Therefore, it would have been obvious to one of ordinary skill in the art that the

remote device may comprise a remote NDIS component for communicating NDIS messages.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe and Narisi with AAPA because the disclosure of AAPA of paragraph 25 would improve the system of Watanabe and Narisi by providing a standardized interface capable of supporting different network-connected devices, and providing bus-independent message sets. Furthermore, AAPA would allow for efficient configuration of network-connected devices.

27. As per claims 5 and 6, Watanabe does not teach a data communication system as recited in claim 1, wherein the remote data communication interface driver is a Remote Network Driver Interface Specification (NDIS) driver configured to communicate Remote NDIS messages with the virtual driver component via the virtual network.

28. AAPA discloses the remote data communication system, wherein the remote data communication interface is a Remote Network Driver Interface Specification (NDIS) driver configured to communicate Remote NDIS messages (Page 7, lines 12-15).

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe and Narisi with AAPA because the disclosure of AAPA of a data communication interface being a remote NDIS driver configured to communicate Remote NDIS messages would improve the system of Watanabe and Narisi by providing a standardized interface capable of supporting different network-connected devices, and providing bus-independent message sets. Furthermore, AAPA would allow for efficient configuration of network-connected devices.

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30. Narisi teaches of a data communication interface driver comprising a NDIS driver that communicates with a virtual driver in a virtual LAN to communicate between two servers (Col 16, lines 29-44).

31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe, Narisi, and AAPA because the teachings of Narisi of a NDIS driver that communicates with a virtual driver in a virtual LAN would improve the system of Watanabe, Narisi, and AAPA by providing a high speed communications interface and allowing devices to use their native mechanism to communicate with each other (Col 16, lines 39-42).

32. As per claims 7, 8 43, and 44, Watanabe does not teach a data communication system as recited in claim 1, wherein the remote data communication interface is a Remote Network Driver Interface Specification (NDIS) driver and the data communication interface is a Remote NDIS component configured to communicate NDIS messages with the Remote NDIS driver via the point-to-point data communication link, and the Remote NDIS driver is configured to communicate the Remote NDIS messages with the virtual driver component via the virtual network.

33. AAPA discloses of an computing device comprising a Remote NDIS miniport driver, which communicates with a remote device, wherein the computing device and the remote device communicate using remote NDIS message and, and via a USB connection (Page 1, lines 8-10; Page 7, lines 12-15; Page 8, lines 1-2).

34. AAPA does not teach explicitly teach that the data communication interface is a Remote NDIS component. However, the remote device is capable of receiving and transmitting NDIS

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messages. Therefore, it would have been obvious to one of ordinary skill in the art that the remote device may comprise a remote NDIS component for communicating NDIS messages. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe, Narisi, and AAPA because the teachings of paragraph 33 would improve the system of Watanabe and Narisi by providing a standardized interface capable of supporting different network-connected devices, and providing bus-independent message sets. Furthermore, AAPA would allow for efficient configuration of network-connected devices.

35. Narisi teaches of a data communication interface driver comprising a NDIS driver that communicates with a virtual driver in a virtual LAN in order to communicate between the two servers (Col 16, lines 29-44).

36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watanabe, Narisi, and AAPA because the teachings of Narisi of a NDIS driver that communicates with a virtual driver in a virtual LAN would improve the system of Watanabe, Narisi, and AAPA by providing a high speed communications interface and allowing devices to use their native mechanism to communicate with each other (Col 16, lines 39-42).

Conclusion

37. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

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38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 13, 2006
JJ



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